AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (**Currently Amended**) A phosphoramidite method for the synthesis of a nucleic acid oligomer without protecting the base moiety, which comprises:

reacting a 3' or 5' hydroxyl group of a nucleotide, optionally attached to a solid phase support, with a nucleoside phosphoramidite, a cyclonucleoside phosphoramidite, a 2'-substituted nucleoside phosphoramidite, a 4'-substituted nucleoside phosphoramidite, or a 2',4'-di-substituted nucleoside phosphoramidite to produce a phosphodiester linkage;

wherein ~~contacting a~~ the phosphoramidite ~~nucleic acid or a phosphoramidite nucleic acid analogue~~ is contacted with an activator, ~~which is a mixture of~~ and the activator comprises both a) an alcohol-type compound selected from the group consisting of hydroxybenzotriazole-1-ol (HOBt), a mono-substituted or di-substituted HOBt ~~derivative~~ and a di-substituted phenol ~~analogue~~[[;]] and b) an acid catalyst~~; to form a nucleic acid oligomer~~ selected from the group consisting of imidazole, tetrazole, benzimidazoletriflate (BIT), 4-ethylthiotetrazole, imidazolium triflate(trifluoromethane sulfonate) and 4,5-dicyanoimidazole.

3. (Cancelled)

4. (**Currently Amended**) ~~A~~ The method according to Claim 2, wherein the substituted HOBt ~~derivative~~ has substituents at its 4 and/or 6 positions.

PAGE 5/11 * RCVD AT 2/16/2010 6:33:23 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/7 * DNIS:2738300 * CSID:7032058050 * DURATION (mm-ss):01-46

5. **(Currently Amended)** ~~A~~ The method according to Claim 4, wherein the substituted HOBt ~~derivative~~ is 6-trifluoromethylbenzotriazole-1-ol, 6-nitrobenzotriazole-1-ol, or 4-nitro-6-trifluoromethyl benzotriazole-1-ol.

6. **(Currently Amended)** ~~A~~ The method according to Claim 2, wherein the di-substituted phenol ~~analogue~~ is selected from the group consisting of 2,4-dinitrophenol, 3,4-dicyanophenol and 2-nitro-4-trifluoromethylphenol.

7. **(Currently Amended)** ~~A~~ The method according to ~~claim~~ Claim 2, wherein the acid catalyst is selected from the group consisting of imidazole, tetrazole, ~~and their derivatives~~ benzimidazoletriflate (BIT), 4-ethylthiotetrazole, imidazolium triflate and 4,5-dicyanoimidazole.

8. **(Cancelled)**

9. **(Currently Amended)** ~~A~~ The method according to Claim 2, wherein said activator comprises an equal amount of the alcohol-type compound and the acid catalyst.

10. **(Currently Amended)** ~~A~~ The method according to Claim 2, wherein said method is carried out with the nucleotide attached to ~~use of~~ a solid phase support.

11. - 13. (Cancelled)

MSW/SAW:kml

PAGE 6/11 * RCVD AT 2/16/2010 6:33:23 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/7 * DNIS:2738300 * CSID:7032058050 * DURATION (mm-ss):01-46

14. **(Currently Amended)** ~~A~~ The method according to Claim 2, wherein the activator comprises ~~the mixture of~~ 6-trifluoromethylbenzotriazole-1-ol and benzimidazoletriflate ~~is used as the activator~~.

15. **(Currently Amended)** A phosphoramidite method for the synthesis of a nucleic acid oligomer without protecting the base moiety, which comprises:

reacting a 3' or 5' hydroxyl group of a nucleotide, optionally attached to a solid phase support, with a nucleoside phosphoramidite, a cyclonucleoside phosphoramidite, a 2'-substituted nucleoside phosphoramidite, a 4'-substituted nucleoside phosphoramidite, or a 2',4'-di-substituted nucleoside phosphoramidite to produce a phosphodiester linkage;

wherein ~~contacting a~~ the phosphoramidite ~~nucleic acid or a phosphoramidite nucleic acid analogue~~ is contacted with an activator, ~~which is a mixture of~~ and the activator comprises a) an alcohol-type compound selected from the group consisting of hydroxybenzotriazole-1-ol (HOBt), 6-trifluoromethylbenzotriazole-1-ol, 6-nitrobenzotriazole-1-ol, 4-nitro-6-trifluoromethyl benzotriazole-1-ol, 2,4-dinitrophenol, 3,4-dicyanophenol and 2-nitro-4-trifluoromethylphenol; and b) an acid catalyst selected from the group consisting of imidazole, tetrazole, benzimidazoletriflate (BIT), 4-ethylthiotetrazole, imidazolium triflate(trifluoromethane sulfonate) and 4,5-dicyanoimidazole~~; to form a nucleic acid oligomer~~.

MSW/SAW:kmf